## KVS AGRA REGION Worksheet -1 (Heron's Formula)

**Q.1** find the length of each side of an equilateral triangle having an area of  $9\sqrt{3}$  cm<sup>2</sup>.

**Q.2** Find the area of an isosceles triangle having base 2 cm and the length of one of them equal sides 4 cm.

Q.3 How many times the area is changed when the sides of the triangle are doubled.

**Q.4** If the perimeter of an isosceles triangle is 11cm and its base is 5cm, its area is  $5/4\sqrt{11}$  cm<sup>2</sup>. State true or false and give reason.

**Q.5** If the area of an equilateral triangle is  $16\sqrt{3}$  cm<sup>2</sup>, then find the perimeter of the triangle.

**Q.6** The cost of levelling a ground in the form of a triangle having the side 51m,37m and 20m at the rate of 3 per meter square is 918. State whether the statement is true or false and justify your answer.

**Q.7** The perimeter of an isosceles triangle is 32cm. The ratio of the equal side to its base is 3:2. Find the area of the triangle.

**Q.8** The length of the sides of a triangle are 7cm, 13cm and 12cm. Find the length of perpendicular from the opposite vertex to the side whose length is 12 cm.

**Q.9** The perimeter of a triangle is 50 cm. One side of a triangle is 4 cm longer than the smaller side and the third side is 6cm less than twice the smaller side. Find the area of the triangle.

**Q.10** If each side of a triangle is doubled, then find the ratio of area of the new triangle thus formed and the given triangle.